

United States Department of the Interior
U.S. Geological Survey
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## Maryland-Delaware-District of Columbia Water Science Center

## **Seminar Series**

Monday, August 25, 2014, 1:00-2:00 pm

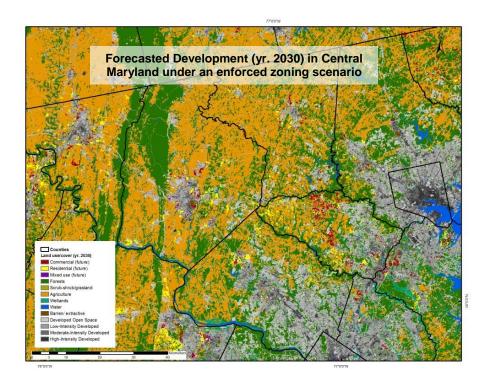
## **Urban Growth Modeling in the Delaware River and Chesapeake Bay Watersheds**



Peter Claggett, Geographer, U.S. Geological Survey

Land cover/use change modeling is now an essential component of long-term water resource studies thanks to advances in remote sensing, land change modeling, and recent attention to the environmental implications of climate change. To better understand the environmental implications of future land use change in the Chesapeake Bay Watershed, the USGS developed the Chesapeake Bay Land Change Model (CBLCM).

The CBLCM simulates future residential and commercial development at a 30m-cell resolution and is currently used to inform water quality restoration decisions in the Chesapeake Bay watershed. It is also being used in the Delaware River Watershed as part of the USGS Water Census designed to assess the adequacy of freshwater supplies for meeting present and future human and ecological needs. The model is planned for use to inform revised state watershed implementation plans and offset and trading strategies in the Chesapeake Bay watershed, and inform land conservation decisions in both the Chesapeake Bay and Delaware River Watersheds.



Peter Claggett is a Geographer with the U.S. Geological Survey's Eastern Geographic Science Center. Peter's research focuses on characterizing and modeling changing land use/cover conditions in the Mid-Atlantic region.

This presentation will also available remotely via Webex: <a href="https://usgs.webex.com/">https://usgs.webex.com/</a>

For directions to the USGS MD-DE-DC WSC: http://md.water.usgs.gov/directions/baltimore.html.

Bio: Peter Claggett is a Geographer with the U.S. Geological Survey's Eastern Geographic Science Center. Peter has received Master degrees in Geography and Environmental Science from Miami University of Ohio and a B.A. in Environmental Sciences from the University of California at Berkeley. He is currently pursuing a doctoral degree in Geography and Environmental Systems at the University of Maryland, Baltimore County. Mr. Claggett started his career as a Peace Corps volunteer followed by positions with the U.S. Environmental Protection Agency in Philadelphia and the Canaan Valley Institute based in West Virginia. For the past twelve years, Mr. Claggett has worked for the U.S. Geological Survey where he conducts research in the Mid-Atlantic region on land use/cover characterization and land change analysis and modeling.

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